

Fig. 1- (PRIOR ART)

Fig. 3 (PRIOR ART)

FIGURE 1

FIGURE 3

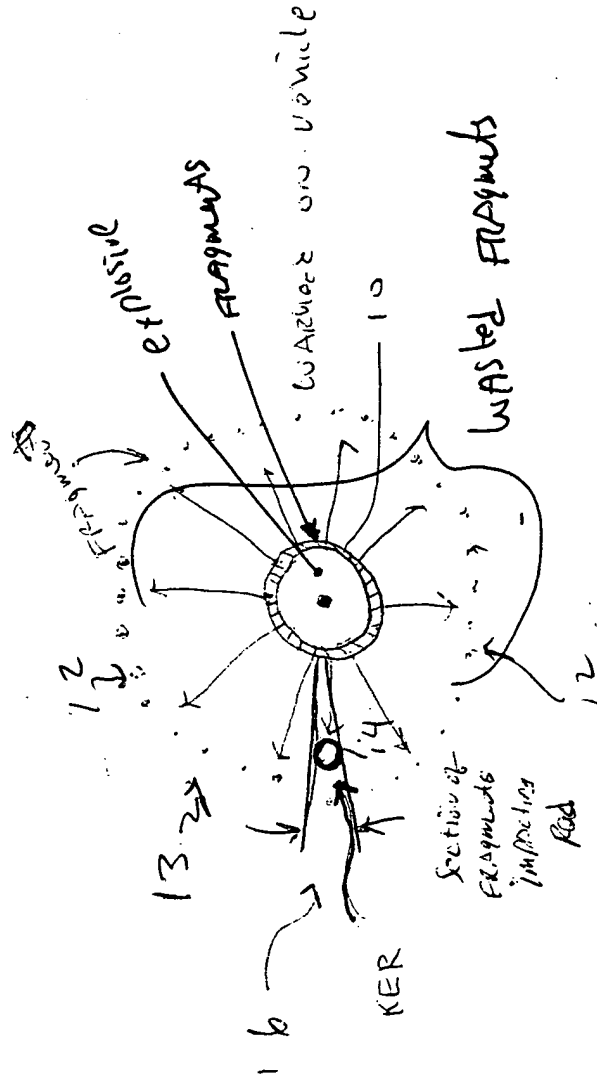
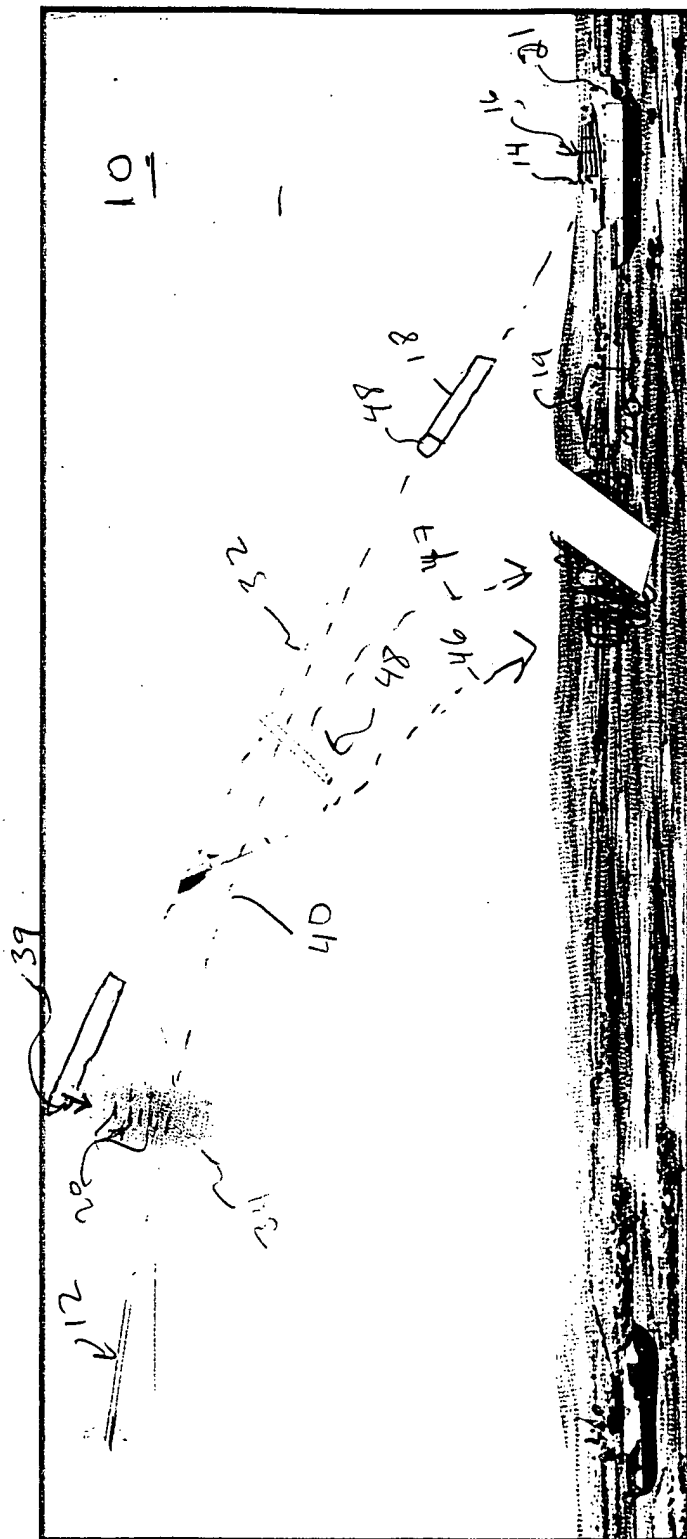


Fig. 2 (PRIOR ART)

# Design Considerations

Raytheon  
PROPRIETARY/  
COMPETITION  
SENSITIVE

Applicant: Richard M. Lloyd  
Title: VEHICLE-BORNE SYSTEM AND METHOD FOR  
COUNTERING AN INCOMING THREAT  
Docket No.: RAY-144J  
Attorney: Roy J. Coleman, Reg. No. 48,863  
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# T80 MBT fitted with Arena APS

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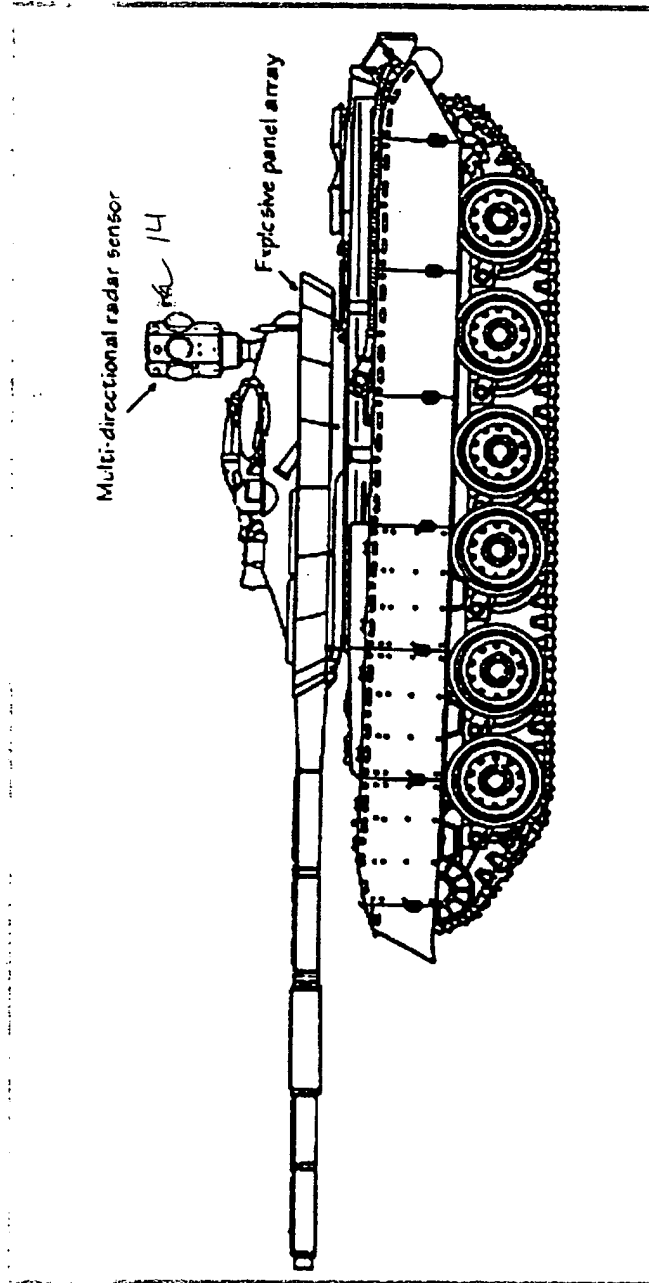
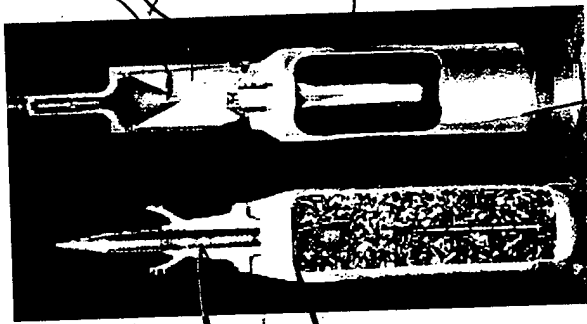


Fig. 5



Handwritten notes in the top right corner, including "Charge Line" and "PT".

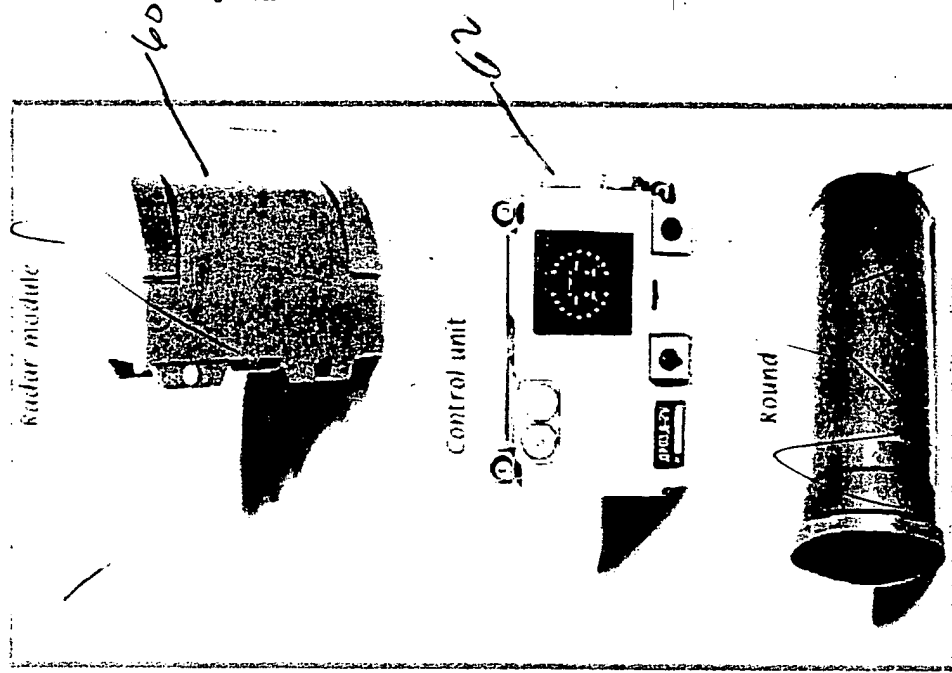


Fig. 7B

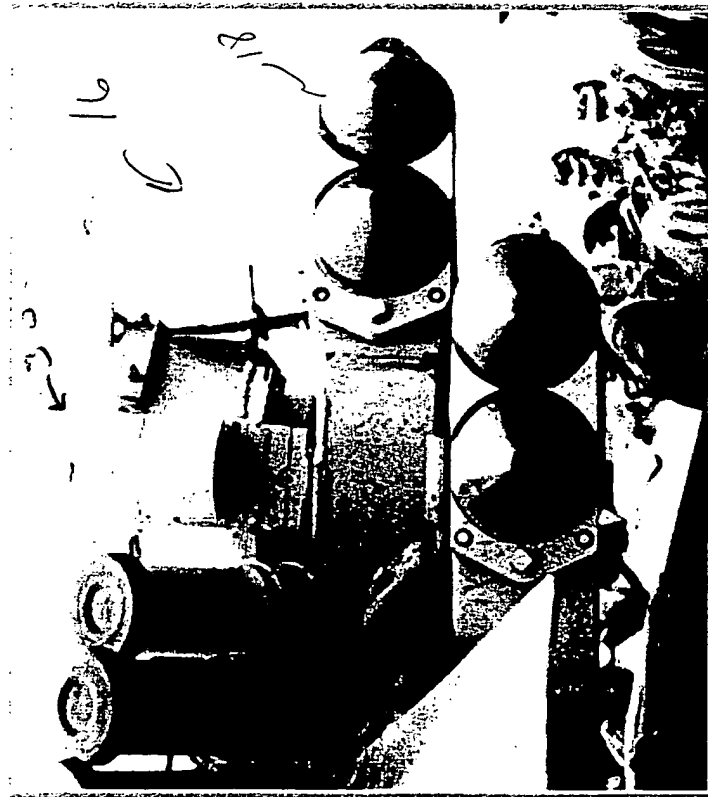


Fig. 7A

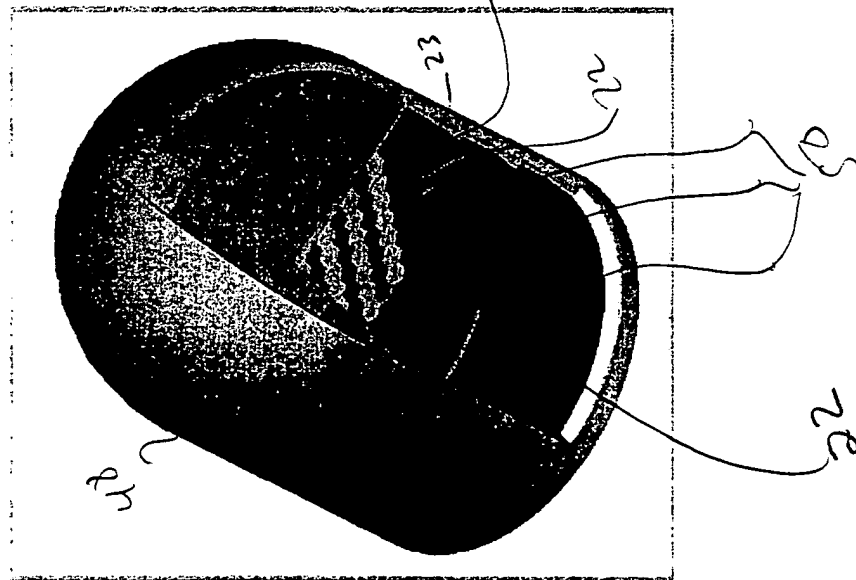


Fig. 8A

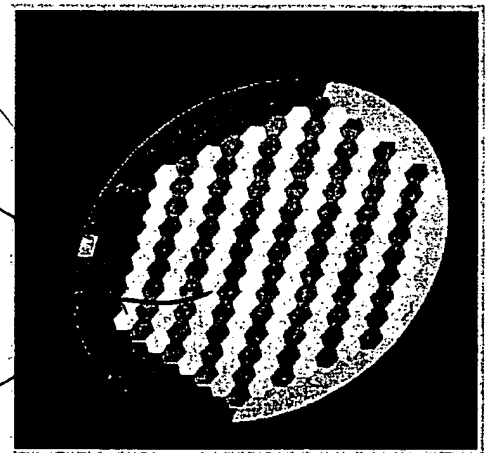


Fig. 8B

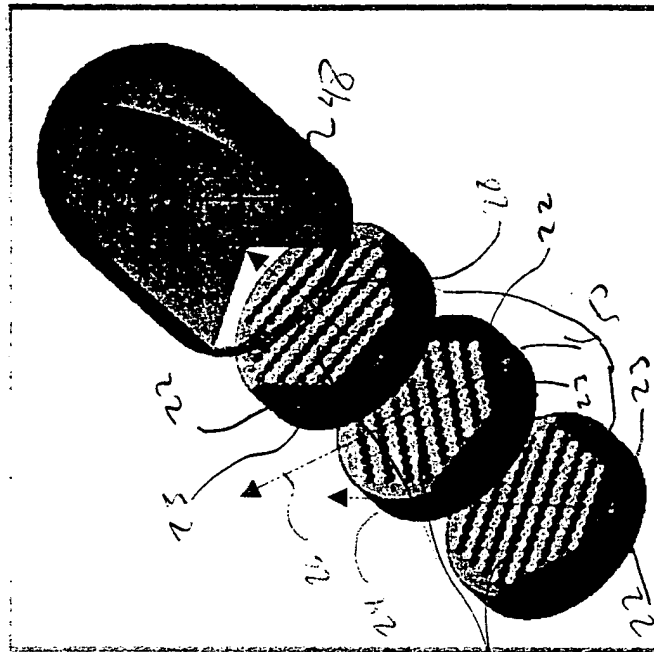


Fig. 8C

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21/11/2018

2019/10/19

~~MISSILE THREAT ENGAGEMENT CONCEPT~~

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Fig. 9

1



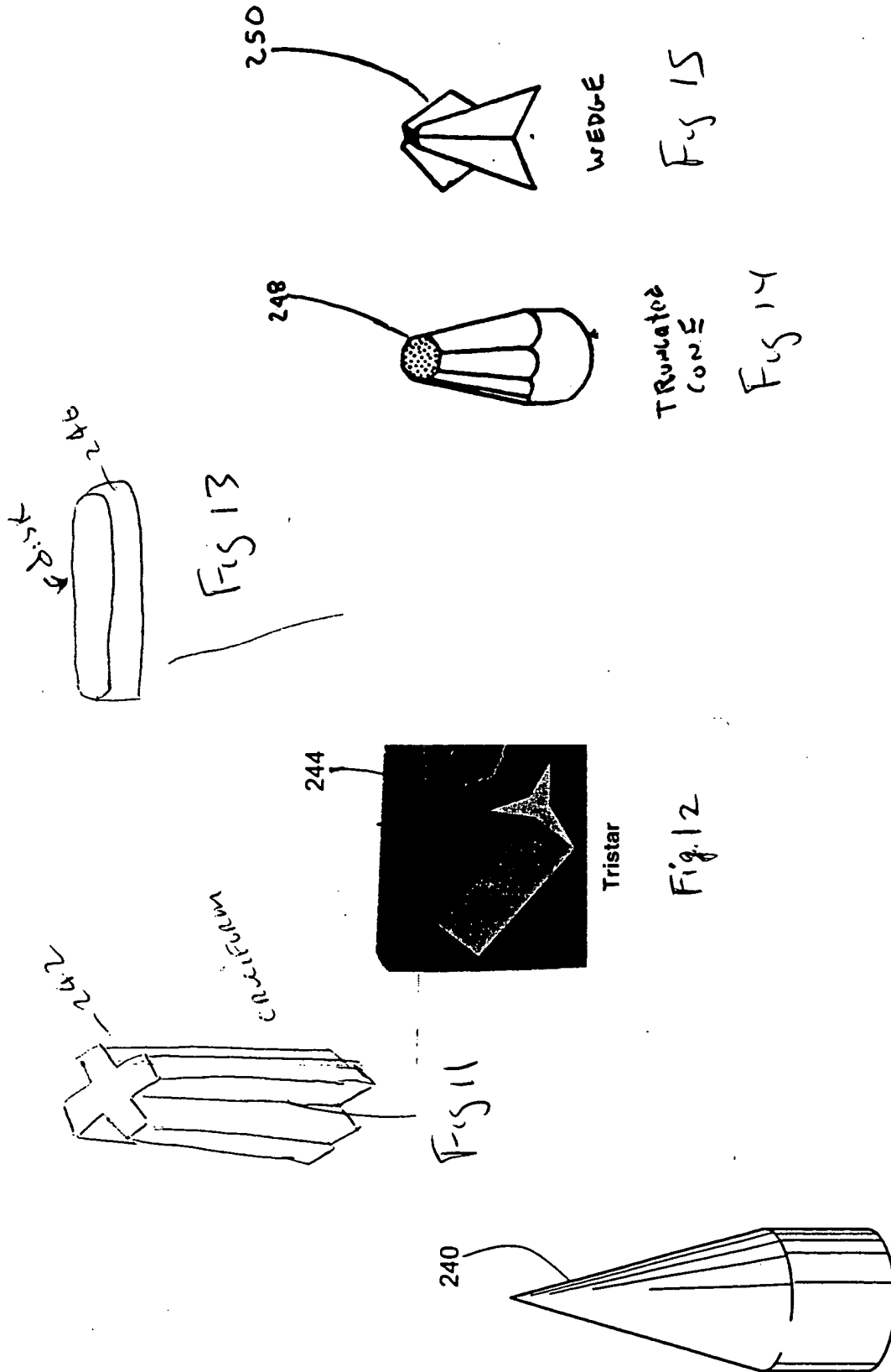


Fig. 10  
 Fig. 11  
 Fig. 12  
 Fig. 13  
 Fig. 14  
 Fig. 15  
 Fig. 16

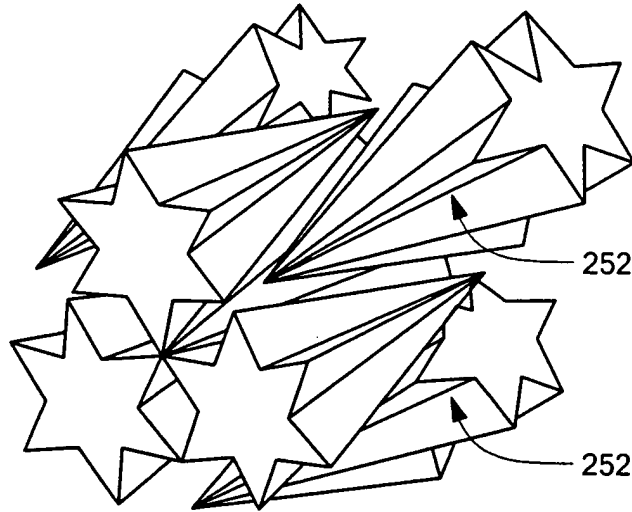


Fig. 16

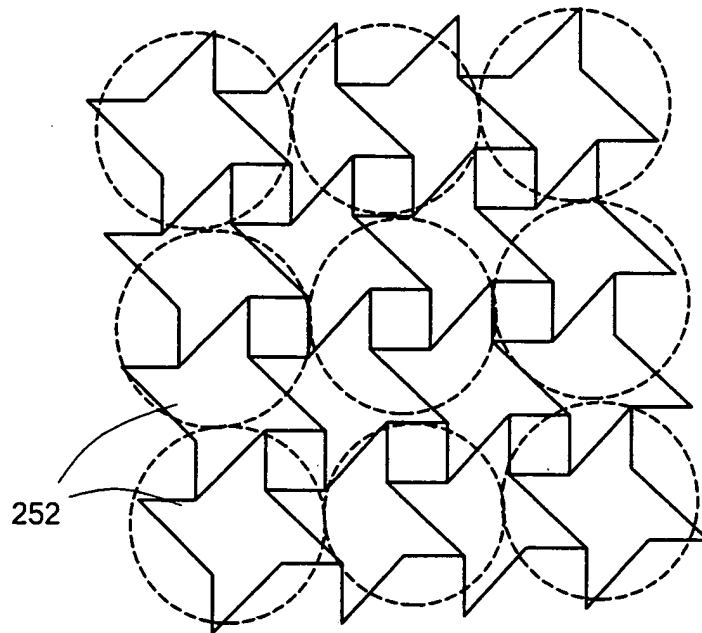


Fig. 17

~~BMP-3 ICV fitted with ARENA APS~~

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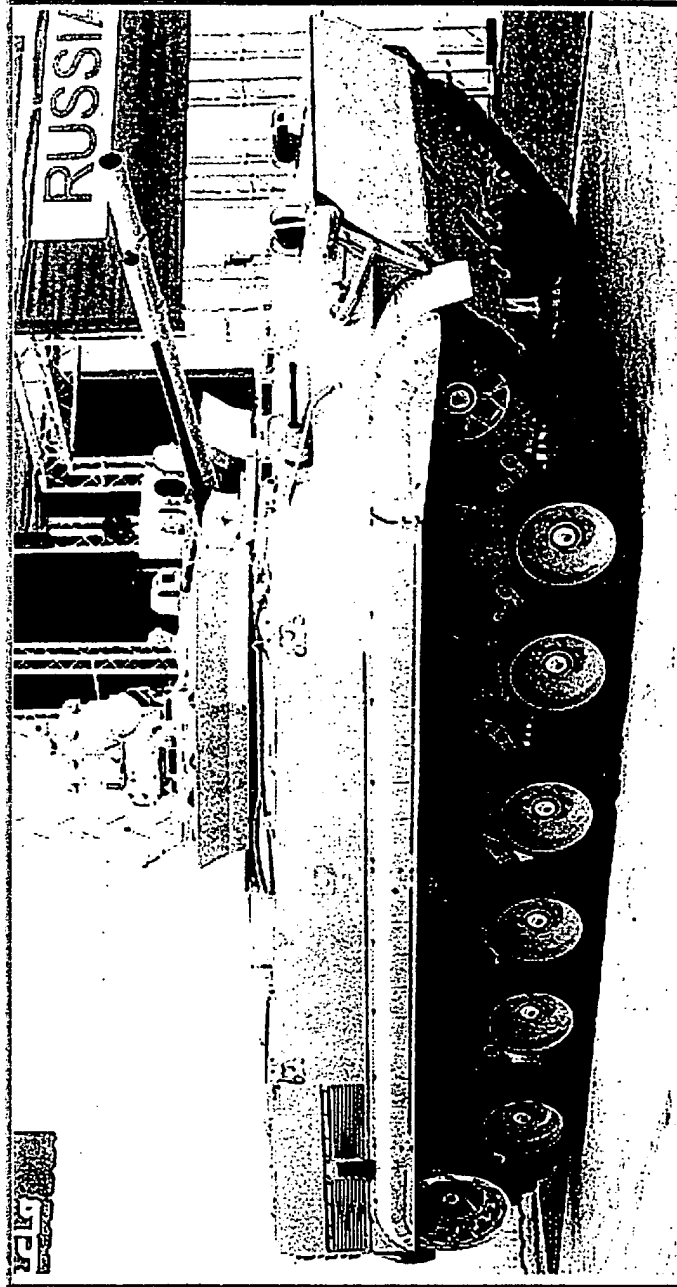


Fig. 18

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T-80UM2 fitted with DROZD APS

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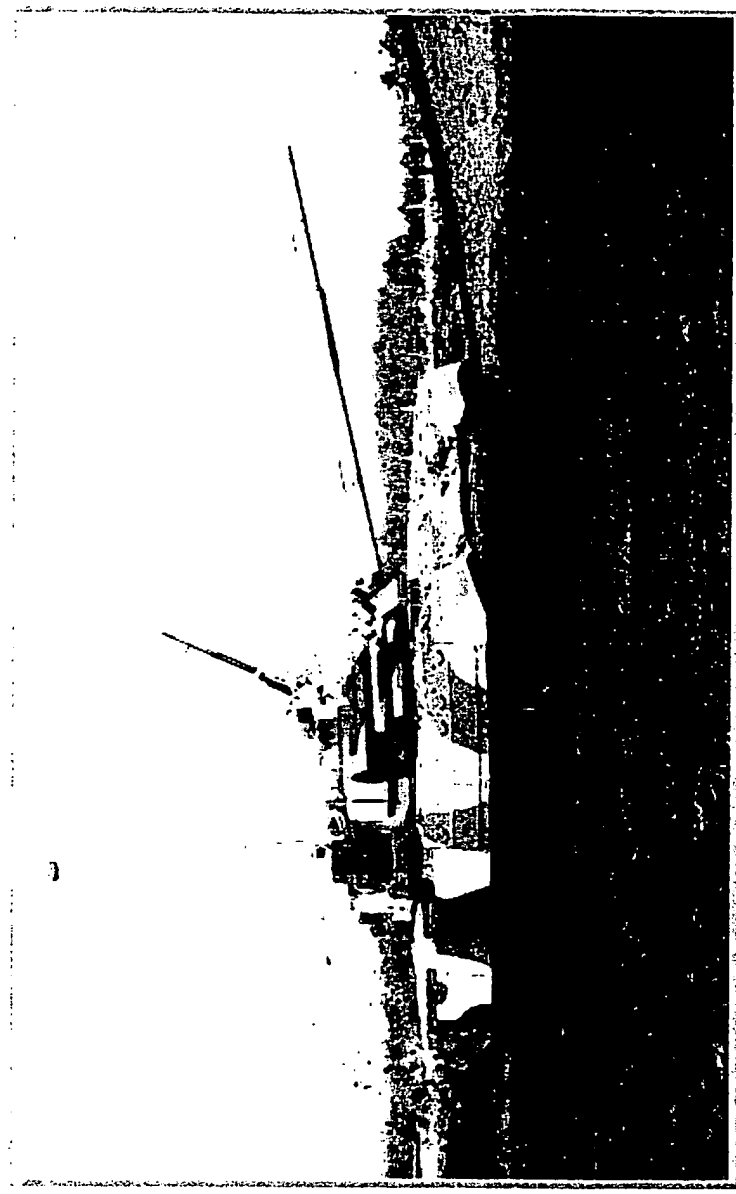


Fig. 19

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T-800UM1 (Snow Leopard) fitted with ARENA APS

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Fig. 20

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SENSITIVE

APENA APS fitted on BMP-3 IGV close-up

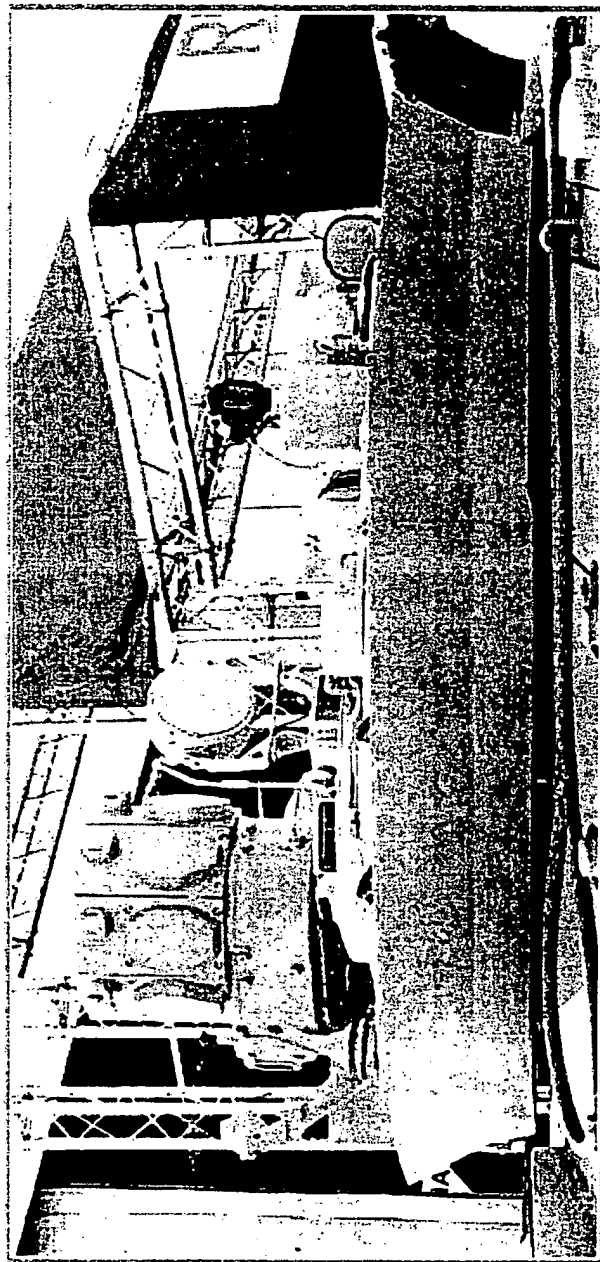


Fig. 21

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4

Sensing an incoming threat

-100

Activating an active protection system including a maneuverable interceptor incorporating a plurality of kinetic energy rods and an explosive charge configured to aim the kinetic energy rods in a predetermined direction;

-102

Maneuvering the interceptor to intercept the incoming threat;

-104

detecting if the interceptor will miss the incoming threat, and if the interceptor will miss the incoming threat, initiating the explosive charge to aim the kinetic rods into a disbursed cloud in the trajectory path of the incoming threat and between the incoming threat and the vehicle.

-106

Fig. 22